

Conference Abstract

Adding Taxonomic Dimensions to the Scientific Names Index in the Biodiversity Heritage Library via Integration with the Catalogue of Life

Dmitry Mozzherin[‡], Geoffrey Ower[‡]

[‡] University of Illinois at Urbana-Champaign, Champaign, United States of America

Corresponding author: Dmitry Mozzherin (dmozzherin@gmail.com)

Received: 29 Sep 2020 | Published: 09 Oct 2020

Citation: Mozzherin D, Ower G (2020) Adding Taxonomic Dimensions to the Scientific Names Index in the Biodiversity Heritage Library via Integration with the Catalogue of Life. Biodiversity Information Science and Standards 4: e59130. <https://doi.org/10.3897/biss.4.59130>

Abstract

The most significant specialized and open resource for biodiversity literature is the [Biodiversity Heritage Library](#) (BHL). BHL contains more than 200,000 volumes that cover hundreds of years of biological publications. The [Catalogue of Life](#) (CoL) is the largest aggregator of global taxonomic information. The [Global Names](#) project collaborates with BHL and CoL to create a BHL scientific names index that is continuously improved. The index allows researchers to conveniently find relevant information about any name. Building a scientific names index is challenging because scientific names are quite dynamic and can dramatically change in taxonomic meaning over time. According to our estimates, on average, there are three scientific names per species. Also, a significant number of scientific names have fallen into disuse. For example, approximately 25% of names used in Zoology between 1750–1850 and collected by Charles Sherborn into [Index Animalium](#) disappeared from current nomenclatural and taxonomic databases. It is important, therefore, to add "taxonomic intelligence" to BHL names index search and present not only data about a specific name-string but also about all known synonyms so that all relevant information in BHL can be consolidated and conveniently accessed from taxonomic information aggregators like CoL. We developed an open source program "[bhlnames](#)", which creates a two-way bridge between the Catalogue of Life and Biodiversity Heritage Library. It provides the location of information in BHL about a taxon,

using all names associated with the taxon according to Catalogue of Life synonymy data. Using that information, it attempts to provide CoL with a BHL link to the first descriptions of scientific names in the literature.

Keywords

taxonomy, nomenclature, literature, global names

Presenting author

Dmitry Mozzherin

Presented at

TDWG 2020

Hosting institution

University of Illinois at Urbana-Champaign

Author contributions

Dmitry Mozzherin programming

Geoffrey Ower programming